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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,513	12/19/2003	Sanigepalli V. Praveenkumar	CE11527JDP	8213

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10/17/2005

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EXAMINER

HANNIF ALI, LARRY

ART UNIT

PAPER NUMBER

2688

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,513

Applicant(s)

PRAVEENKUMAR ET AL.

Examiner

Larry Hannif-Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-8-04, 12-19-03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 (b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 3, 4, 5, 6, and 7** are rejected under 35 U.S.C. 102(b) as being unpatentable over Rostoker (Patent No: 6006105).

Regarding **Claim 1**. Rostoker teaches a method for selecting one or more modalities from a group of modalities available in a communication device having a modality manager, the communication device operating in one or more communication systems [Col 4, lines 61-65 & Col 5, lines 46-67], the method comprising the steps of: (a) determining the available bandwidth [Col 4, lines 61-65]; (b) providing the bandwidth information determined in step (a) to the modality manager [Col 5, lines 8-13 & Col 5, lines 46-51 (microcontroller selectively activates one of the first and second adaptation branches...)]; and (c) having the modality manager select the one or more modalities based on the bandwidth information [Col 5, lines 51-67 (microcontroller controls adaptation circuit for conversion of information ...form and format or standard or protocol)].

Regarding **Claim 3**. Rostoker teaches wherein the one or more modalities comprise input modalities [Col 5, lines 24-30].

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Regarding **Claim 4**. Rostoker teaches wherein the one or more modalities include video, still pictures, audio clips, voice and text [Col5, lines 24-27].

Regarding **Claim 5**. Rostoker teaches wherein the one or more modalities comprise output modalities [Col 5, lines 24-30].

Regarding **Claim 6**. Rostoker teaches wherein the modality manager dynamically adapts the one or more modalities selected in step (c) based on a change in operational conditions [Col 5, lines 8-12].

Regarding **Claim 7**. Rostoker teaches wherein the change in operational conditions that causes the modality manager to dynamically adapt the one or more modalities selected in step (c) includes a change in the bandwidth or change in cost of the service presently being used [Col 4, lines 61-65].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 2, 11, 14, 16, 18, 19 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105) in view of Sainton (U.S. Patent No. 6934558 B1).

Regarding **Claim 2**. Rostoker teaches everything as applied above in Claim 1. However, Rostoker fails to specifically teach (d) determining the cost with using one or more of the modalities; (e) providing the cost information determined in step (d) to the modality manager; and (f) having the modality manager select the one or more modalities based on the cost information. The examiner maintains that the claimed limitation was well known in the art as taught by Sainton.

In the same field of endeavor, Sainton discloses an adaptive omni-modal radio apparatus and method where the device is capable of (d) determining the cost with using one or more of the modalities [Col 5, lines 52-54 & Col 5, lines 66-67 & Col 6, lines 1-9]; (e) providing the cost information determined in step (d) to the modality manager [Col 8, lines 34-39]; and (f) having the modality manager select the one or more modalities based on the cost information [Col 6, lines 13-14 & Col 8, lines 39-41].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the omni-modal radio apparatus as taught by Sainton together with the system of Rostoker, in order to have selection criteria based on cost and bandwidth and therefore providing the least cost to the user.

Regarding **Claim 11**. Rostoker teaches a radio communication device, comprising: a receiver [Col 5, lines 33-36]; and a modality manager coupled to the receiver, the modality manager is responsible for dynamically adapting one or more modalities being used based on bandwidth considerations [Col 4, lines 61-65 & Col 5, lines 46-67]. However, Rostoker fails to specifically teach dynamically adapting one or more modalities being used based on cost considerations. The examiner maintains that the claimed limitation was well known in the art as taught by Sainton.

In the same field of endeavor, Sainton discloses an adaptive omni-modal radio apparatus and method where the device is capable of determining the cost with using one or more of the modalities [Col 5, lines 52-54 & Col 5, lines 66-67 & Col 6, lines 1-9]; providing the cost information determined in step (d) to the modality manager [Col 8, lines 34-39]; and having the modality manager select the one or more modalities based on the cost information [Col 6, lines 13-14 & Col 8, lines 39-41].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the omni-modal radio apparatus as taught by Sainton together with the system of Rostoker, in order to have selection criteria based on cost and bandwidth.

Regarding **Claim 14**. The combination of Rostoker and Sainton further teaches wherein the one or more modalities comprise at least one of video, still pictures, audio clips, voice and text [Rostoker: Col 5, lines 24-27].

Regarding **Claim 16**. The combination of Rostoker and Sainton further teaches wherein the modality manager further checks for communication system availability if the radio communication device can operate in different communication systems and uses this information to dynamically adapt the one or more modalities used [Rostoker: Col 5, lines 8-13 & Col 5, lines 56-67].

Regarding **Claim 18**. The combination of Rostoker and Sainton further teaches wherein the modality manager ascertains the cost information from the communication system the radio communication device is operating in [Sainton: Col 5, lines 52-54 & Col 5, lines 66-67 & Col 6, lines 1-9 & Col 8, lines 34-41].

Regarding **Claim 19**. The combination of Rostoker and Sainton further teaches a radio communication device, further comprising a memory coupled to the modality manager; and wherein the modality manager ascertains the cost information from information stored in the memory [Sainton: Col 8, lines 28-30 & Col 5, lines 52-54 & Col 5, lines 66-67 & Col 6, lines 1-9 & Col 8, lines 34-41].

Regarding **Claim 20**. The combination of Rostoker and Sainton further teaches wherein the radio communication device comprises a cellular telephone [Rostoker: Col 6, lines 34-37].

5. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105) in view of Phillips (U.S. Pub. No. 2003/0182125 A1).

Regarding **Claim 9**. Rostoker teaches everything as applied above in Claim 6 including dynamically adapting the selected one or more modalities [Col 4, lines 61-65 & Col 5, lines 56-67]. However, Rostoker fails to specifically teach wherein the change in operational conditions comprises communicating sensitive information if any are speech or audio based modality into a text based modalities in order to protect the sensitive information from being heard by others. The examiner maintains that the claimed limitation was well known in the art as taught by Phillips.

In the same field of endeavor, Phillips discloses a method and apparatus for multimodal communication wherein the change in operational conditions comprises communicating sensitive information if any are speech or audio based modality into a text based modalities in order to protect the sensitive information from being heard by others [paragraph 0023, lines 1-23].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use the method and apparatus for multimodal communication wherein the change in operational conditions comprises communicating sensitive information if any are speech or audio based modality into a text based modalities as taught by Phillips together with the dynamically self adapting system of Rostoker in order to have secure communications for communicating sensitive information.

6. **Claims 8 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105) in view of Balasuriya (U.S. Pub. No. 2003/0126330 A1).

Regarding **Claim 8**. Rostoker teaches everything as applied above in Claim 6. However, Rostoker fails to specifically teach wherein the change in operational

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conditions that causes the modality manager to dynamically adapt the one or more modalities selected in step (c) includes a change in the current ambient noise above a predetermined threshold level. The examiner maintains that the claimed limitation was well known in the art as taught by Balasuriya.

In the same field of endeavor, Balasuriya discloses a multimodal communication apparatus including a condition sensor, wherein the change in operational conditions that causes the modality manager to dynamically adapt the one or more modalities selected in step (c) includes a change in the current ambient noise above a predetermined threshold level [paragraph 0016].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the multimodal communication system with the condition sensor as taught by Balasuriya, together with the system of Rostoker, in order to have selection criteria based on cost, bandwidth.

Regarding **Claim 10**. The combination of Rostoker and Balasuriya further teaches wherein the modality manager keeps track of user preferences for different modalities amongst the plurality of modalities and when the modality manager has to adapt the one or more modalities previously selected, the modality manager uses the preference information to select one or more new modalities to use [Balasuriya: paragraph 0013, lines 1-9].

7. **Claims 12 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105) in view of in view of Sainton (U.S. Patent No. 6934558 B1) and further in view of Balasuriya (U.S. Pub. No. 2003/0126330 A1).

Regarding **Claim 12**. The combination of Rostoker and Sainton teaches everything as applied above in Claim 11. However, the combination fails to specifically teach wherein the modality manager dynamically adapts one or more modalities currently being used if the ambient noise is above a predetermined threshold. The examiner maintains that the claimed limitation was well known in the art as taught by Balasuriya.

In the same field of endeavor, Balasuriya discloses a multimodal communication apparatus including a condition sensor, wherein the modality manager dynamically adapts one or more modalities currently being used if the ambient noise is above a predetermined threshold level [paragraph 0016].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the multimodal communication system with the condition sensor as taught by Balasuriya, together with the system of Rostoker and Sainton, in order to have selection criteria based on cost, bandwidth and ambient noise.

Regarding **Claim 13**. The combination of Rostoker, Sainton, and Balasuriya further teaches a radio communication device comprising a microphone coupled to the modality manager, and the microphone is used to determine the ambient noise [Balasuriya: Fig 1, Items 120 and 112 & paragraph 0016].

8. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105) in view of Sainton (U.S. Patent No. 6934558 B1) and further in view of Rabe (Patent No. 6138010).

Regarding **Claim 15**. The combination of Rostoker and Sainton teaches everything as applied above in Claim 11 including a modality manager in the radio communication device [Rostoker: Col 5, lines 46-55]. However, the combination fails to specifically teach wherein the radio communication device operates in a communication system having a server modality manager and the modality manager in the radio communication device communicates with the server modality manager in order to make sure that any information using a particular modality directed to the radio communication device can be supported. The examiner maintains that the claimed limitation was well known in the art as taught by Rabe.

In the same field of endeavor, Rabe discloses a multimode communication device where the radio communication device operates in a communication system having a server modality manager and the modality manager in the radio

communication device communicates with the server modality manager in order to make sure that any information using a particular modality directed to the radio communication device can be supported [Col 2, line 67 & Col 3, lines 1-7 & Col 3, lines 39-46 & Col 4, lines 26-29 & Fig 1, Items 114, 120, and 136].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the network controller/system controller as taught by Rabe together with the system of Rostoker and Sainton, in order to have a multimode communication device with server modality manager capability.

9. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker (Patent Number: 6006105) in view of in view of Sainton (U.S. Patent No. 6934558 B1) and further in view of Phillips (U.S. Pub. No. 2003/0182125 A1).

Regarding **Claim 17**. The combination of Rostoker and Sainton teaches everything as applied above in Claim 11. However, the combination fails to specifically teach wherein the modality manager dynamically controls which of the one or more modalities may be used with an application that is selected by the radio communication device user. The examiner maintains that the claimed limitation was well known in the art as taught by Phillips.

In the same field of endeavor, Phillips discloses a multimodal communication apparatus where the modality manager dynamically controls which of the one or more modalities may be used with an application that is selected by the radio communication device user [paragraph 0023, lines 1-15].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the multimodal apparatus as taught by Phillips together with the system of Rostoker and Sainton in order to have a user activated modality manager.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry Hannif-Ali whose telephone number is 571-272-5598. The examiner can normally be reached on Mon-Fri.

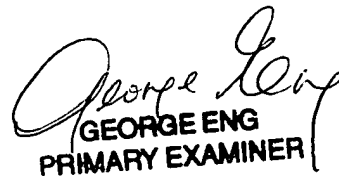
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Larry Hannif-Ali

October 4, 2005



GEORGE ENG
PRIMARY EXAMINER